Characteristics of Vlog News Report Communication Based on User Behavior Data: Taking CCTV Vlog as an Example

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Abstract. Video Blog (Vlog) has emerged as a popular form of video blogging in China, integrating multiple elements and capturing the attention of young people and mainstream media. China Central Television (CCTV) has embraced Vlog as a platform to expand the dissemination channels of mainstream discourse, resulting in effective and rapid propagation. Understanding the dissemination characteristics of CCTV Vlog is crucial due to its significant impact. This study analyzes and explores the dissemination characteristics of CCTV Vlogs in the online realm to provide insights for news industry professionals navigating the networked environment. By focusing on CCTV Vlog as the research subject, this paper examines its propagation characteristics in detail. Leveraging collaborative filtering recommendation algorithms based on user behavior data and user similarity, the study identifies users' potential interests and delivers relevant news recommendations, thus generating increased social and economic value. Experimental findings indicate that only 6.4% of males find traditional CCTV news highly attractive, while an impressive 64% find CCTV Vlog news captivating. Moreover, the age distribution of CCTV Vlogs predominantly falls within the 19 to 28-year-old range, indicating a predominantly young audience.

Keywords: User Behavior Data, Video Blog, Collaborative Filtering Recommendation Algorithm, China Central Television.

1. Introduction

The rapid development of cities makes it easy for young people who have not yet obtained sufficient capital to feel lost. Lack of belonging, social anxiety, and emptiness directly manifest in individuals, creating the loneliness of empty nest youth. Short videos have become a hot topic in the industry in just a few years, with a large amount of high-quality content appearing in various vertical segmentation fields (Wang B, 2022) [1]. However, in the past, the extensive UGC and homogenized PGC have been unable to meet users' needs for high-quality content. Different from the grassroots aesthetic orientation of "Kwai", Vlog is committed to breaking away from unfashionable, judging ugliness and spoofing, and taste isolation has changed the preferences of short video content consumers (Arthurs J, Drakopoulou S, Gandini A, 2018) [2].

At present, spreading news through short videos has become the focus of attention for major media workers. Many media news clients have set up short video news sections or created a special video news column, and short videos would be the main form of news release in the future. Vlog is the future direction of development, and its popularity on social networks has attracted the attention of many media organizations, starting to report news in the form of Vlogs. For example, once broadcasted, CCTV Vlogs sparked a heated discussion on the internet, forming a new phenomenon of dissemination. As an emerging social media, its influence and value cannot be underestimated.

2. Literature Review

The arrival of the new media era has made the transmission of information more diversified. People's needs for information transmission and acquisition can no longer be met. Traditional news media has gradually become diversified, and Vlog news has begun to appear. He Jingfan analyzed the psychological immersion of the masses based on the psychological experience process shaped by Vlog news media. Based on the psychological experience process, Vlog news media can increase the public's sense of spatial immersion, psychological participation, and authenticity experience, which increases the communication effectiveness and influence of the media, and had great research value [3]. Egelhofer Jana Laura believed that "fake news" implies two dimensions of political communication: fake news types and fake news labels. Despite increasing public concerns about politicians using this label, academic interest mainly focuses on the types of fake news. He linked the existing fake news literature with the relevant concepts of political communication and journalism research, and proposed a theoretical framework for studying fake news [4]. Li Xiang found that, with the development of internet technology, the importance of news in the new media era has gradually become prominent, and the ways of news dissemination have also undergone significant changes, presenting a more diversified and rapid trend. He analyzed the problems in the new era of news dissemination environment and proposed corresponding countermeasures and suggestions [5]. Kim Eun-mee studied how individuals share controversial news online through statistical crowd characteristics, and people are more likely to highly share controversial news, which indicates that interpersonal motivation determines the controversial online channels. Moreover, news and media environments play a unique role in regulating and disseminating [6]. Schafraad Pytrik examined how news factors in press releases affect journalists' decisions, as well as the news processing of press release information after it was initially selected as the news agenda. Journalists can convert press releases into a news story with minimal investment in news capital [7]. The above scholars propose that utilizing technology to realize the advantages of Vlog news and improve its competitiveness in the new era has always been an important topic.

Vlog news quickly occupied the user group and quickly lowered the threshold for entering the user group, gaining favor from users. The current media environment can be described as "schools of thought contend", and technological innovation is also striving to promote continuous innovation in news, which can to some extent meet the public's demand for factual knowledge. The changes of the times require the news industry to constantly explore and innovate in different news dissemination (Li Jin and Tao Jin, 2022). In recent years, Vlog's position in news reporting has become increasingly prominent,

integrating short videos into traditional news reporting (Dan Viorela and Juliana Raupp, 2018) [8-9]. This is consistent with the development trend of concentrated reporting in the era of fragmentation and can also obtain good audio-visual effects. Next, this paper would analyze the communication characteristics of Vlog news reports.

Vlog combines social interaction and narrative communication characteristics, reflecting the blogger's ideological and aesthetic values in theme presentation. The video editing is flexible and smooth; the subtitles are lively; the background music is full of fashionable atmosphere, which has good ornamental value. In the past two years, under the leadership of creators such as celebrities and internet celebrities, the popularity of Vlogs has become increasingly high, and the post-90s generation is the main target audience of Vlogs. Fashion expression mode is also in line with the communication habits of young people nowadays, and it has become a new trend to record their lives.

The language style, personality expression, and shooting method of the photographer in Vlog news reports can all have an impact on the quality of the work (Bowe, Brian J, 2019) [10]. Especially for famous hosts and journalists, their "celebrity effect" would play a good promoting role in the dissemination of Vlog news, and CCTV has also made many beneficial attempts in this field.

(1) Characteristics of communication subjects

With the advancement of shooting technology and the simplification of editing technology, handheld camera shooting has become increasingly simple. The biggest feature of Vlog is that it can open "selfie mode" on the phone and complete it in its own way. Simply put, it means taking photos according to one's own style, which is a bit like a diary. The difference is that the diary is written in a notebook to ensure privacy, while Vlog is about piecing together the content from the video to form a complete story. From the perspective of the first person, Vlog is more timely and intimate. Of course, Vlog, which takes the first person as the main perspective and combines multiple perspectives, can enable people to obtain more picture content and news materials.

Professional bloggers are journalists, while non professional bloggers can be understood as the general public. In CCTV Vlogs, they may be doctors, international students, or farmers. After editing, they are then posted on video websites and forums. It can be said that both professionals and non professionals play an important role in the dissemination of news information on CCTV Vlogs. As a professional content producer of news reports, the main body of communication is the "main force" of CCTV Vlog production, and it is not limited to professional reporters, while non professional bloggers can also participate. The diversification of communication themes can broaden the content of communication, enrich the perspective of communication, and report from different perspectives by different media based on the same news background. Through this approach, the dissemination subjects of CCTV Vlog news can continuously expand their communication channels as well as information coverage, and track information in a timely manner within a limited time.

(2) Characteristics of communication content

In terms of content classification standards, traditional television news has its own set of conventional classification methods, most of which are professional sports news, livelihood news, political news, financial news, entertainment news, etc. [11-12]. In CCTV Vlogs, most of the topics revolve around current political news, with the content centered around the stories behind the news. Whether it's journalists or non professional bloggers, they express their views through their own perspective and in a Vlog way.

A journalist used his own experience to shoot a Vlog, successfully turning everyone's attention to the inspiring spirit in the fight against the epidemic in antiepidemic period. For example, in the "Chinese Student Vlog | China Gives One Full Sense of Security", a Chinese student had a nucleic acid test in Turkey and then took a plane back to China. In her Vlog, she expressed her concern about the epidemic and her confidence in her homeland.

In the upcoming 5G era, the combination of Vlogs and news would generate more new content and forms, so people must collect more news samples in case of unexpected needs [13-14]. However, Vlog news reporting lacks effective secondary integration and dissemination, and there are certain loopholes in client search that require timely innovation and improvement.

When a user clicks or browses a news page, their browsing steps would change depending on their level of interest in the news. It is found that many of the news on some websites are not what the user really wants to see, which is why the user wants to leave (Glogger, Isabella, and Lukas P. Otto., 2019) [15]. Due to the loss of users on the website, it would have a negative impact on the website over time, which would hinder the dissemination of Vlog news. From this, it can be seen that the failure to retain users is largely due to the inability of the website to provide them with a good experience and help them find valuable information, thus causing them to eventually choose to leave after spending a lot of time. Therefore, it is essential to discover the real needs of users and recommend news according to their interests.

At present, the most commonly used personalized recommendation algorithm is the collaborative filtering recommendation algorithm, which recommends according to the similarity of users. The similarity is a method used to express the similarity between two objects. With the explosive growth of information, it has become more important to find valuable information from massive amounts of data. Therefore, collaborative filtering recommendation algorithms have also been used in many fields, among which news media is a very good field to apply personalized recommendation algorithms, and collaborative filtering has also been used in news recommendation.

Similarity has a wide range of applications in data mining, recommendation systems, and many other fields. The general calculation method is:

$$dis\tan ce(d_i, d_j) = \sqrt{(w_k(d_i) - w_k(d_j))^2}$$

(1)

In the formula, $w_k(d_i)$ represents the one-dimensional vector of user i; $w_k(d_j)$ represents the one-dimensional vector of user j; $dis\tan ce(d_i, d_j)$ represents the absolute distance between user i and user j in a multidimensional space, representing the similarity between user i and user j.

Now the amount of information has been increasing, and the data that needs to be processed by recommendations is also increasing. With the increase in the number of Internet users, the content that the Internet can provide is also increasing. However, the common behavior of any two users is becoming less and less, and the effect of collaborative filtering recommendation algorithm has not been significantly improved. In this situation, how to extract relevant information from the data has become a key issue.

The user behavior data also includes topic feature data. The user's topic feature data refers to the average topic data taken from the topic vector of all news that the user has acted on, and is specified as the user's topic data for a certain period of time. The user's topic data represents a preference for different topics in historical data:

$$u_{(w_1, w_2, ..., w_k)} = \frac{\sum_{Z \in Vector(n(u))} Z}{|n(u)|}$$

(2)

Among them, $n(u)$ represents the collection of all news generated by the user's behavior, and $Vector(n(u))$ represents the topic vector of all news generated by the user's behavior. Overall, user behavior on news websites can be divided into two types: explicit behavior and implicit behavior. Implicit behavior is generally manifested as users browsing the news, commenting on the news, or expressing their own preferences, while the expression is often a direct expression of users' preferences for the news.

A recommendation algorithm based on user similarity first calculates the behavioral similarity

between news and news within a specific period, and then calculates the topic similarity of the news. The behavioral similarity and topic similarity of the news are fused, and different proportions are set to calculate the total news similarity. Similarly, the same method is also used when calculating user similarity. After obtaining the similarity between users, a new piece of information is provided based on their "nearest neighbor" information preferences.

(1) News similarity calculation

Topic similarity and behavioral similarity in news are important characteristics of news similarity. Then, topic similarity and behavioral similarity were analyzed for different types of news (Masip, Pere, 2020) [16]. Topic similarity uses cosine similarity to calculate the topic similarity between two news items:

$$\cos(i, j) = \frac{\vec{ij}}{\left|\vec{i}\right| \times \left|\vec{j}\right|} \tag{3}$$

The calculation method for behavioral similarity between news is to calculate the similarity between two users who simultaneously generate behavior on the same news. This method takes into account time, popular, and unpopular news:

$$sim(i, j) = \frac{\left|m(i) \cap m(j)\right|}{\left|m(i) \cup m(j)\right|} \tag{4}$$

The set of users interested in the same news i is represented by $m(i)$.

(2) User similarity calculation

Similar to news similarity, user behavior similarity and topic similarity together constitute user similarity. The user's theme is in a vector form, and this vector form can also be calculated by cosine to obtain similarity. Therefore, the calculated theme similarity is:

$$\cos(u, v) = \frac{\vec{uv}}{\left|\vec{u}\right| \times \left|\vec{v}\right|} \tag{5}$$

$\vec{u}$ represents the topic feature vector of user u, and $\vec{v}$ represents the topic feature vector of user v. The number of news of mutual interest between two users and all news of interest to both users is calculated, and the similarity between the two results is calculated as the user's similarity:

$$sim(u, v) = \frac{\left|m(u) \cap m(v)\right|}{\left|m(u) \cup m(v)\right|} \tag{6}$$

$m(u)$ represents the news collection of user u, and $m(v)$ also represents the news collection of user v.

(3) Generating recommendations

The user is recommending news that he has not acted on, which is highly similar to the news that he has acted on, and the user may be interested in it. The degree to which the user u likes news can be expressed as:

$$p\_new(u, i) = \sum_{j \in (i,M) \cap m(u)} N(i, j)^{-\gamma} \tag{7}$$

$N(i, j)$ is the similarity of news; γ is the time coefficient; (i, M) represents a collection of M news items. By using this formula, the interest of each user can be predicted. For each user, within a certain period of time, the formula can be used to calculate their liking for news that has not happened before, and they can be sorted based on the size of their liking. Based on the value, they can automatically recommend news that matches their needs to the user.

This method uses the similarity between two users to calculate their preference for news that they

have not previously acted on:

$$p\_user(u,i) = \sum_{j \in (u,M) \cap m(i)} U(u,v)^{-\gamma}$$

(8)

$U(u,v)$ is the final similarity between users u and v. If the user's behavior towards the news is closer to the current time, it indicates that the target user is more likely to have behavior towards the news at similar times, and its preference level is also higher.

3. Research Methodology

This article randomly selected 200 users from the CCTV website and extracted all Vlog news browsing records of these 200 users in May 2021, totaling 3000 browsing records. Each record included user ID, news ID, browsing time, and news text content. The experimental data was divided into two parts. One part was used as the training set (1000 browsing records), and the other part was used as the test set (2000 browsing records).

In order to provide readers with a better experience of reading news, the application of news recommendations on websites has become an effective marketing tool for websites. It can not only improve the efficiency of readers' reading news, but also truly help website merchants retain users and provide more traffic for the website (Peng Yilang, and Tian Yang, 2022) [17]. However, with the development of collaborative filtering recommendation algorithm, a series of problems encountered in its practical application also arise, among which data sparsity is one of the main problems faced by collaborative filtering recommendation algorithm at present.

Collaborative filtering recommendation algorithm and user similarity-based recommendation algorithm are two comparison methods in this paper. As the traditional content-based collaborative filtering algorithm only makes recommendations to users based on the user's historical access matrix, there are problems such as sparse data and inability to reflect user interest changes in a timely manner, personalized news recommendation technology proposes the calculation method of news text content similarity and the concept of time window based on the traditional collaborative filtering algorithm. The similarity calculation of news content also considers the influence of the part of speech and the position of feature words in the news. This paper compared the recommendation accuracy of the collaborative filtering recommendation algorithm (method 1) and the user similarity-based recommendation algorithm (method 2) in the training set and test set, respectively. The recommendation accuracy of different methods in different data sets is shown in Figure 1:
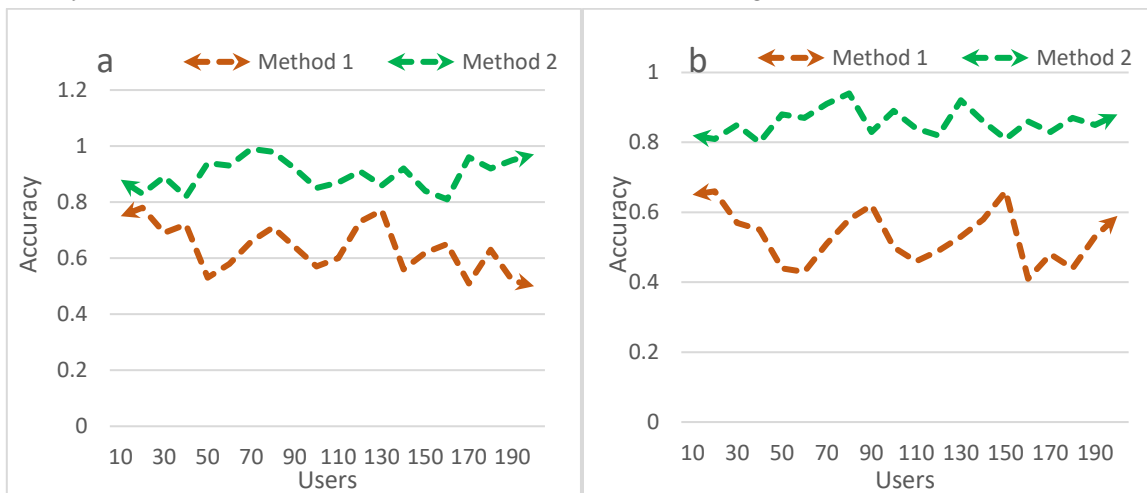

Fig. 1: Recommendation accuracy of different methods in different datasets.
Fig. 1 (a) recommends the accuracy of different methods in the training set.
Fig. 1 (b) Recommended the accuracy of different methods in the test set.

The training set in Figure 1 (a) includes 1000 browsing records from 200 users. The lowest and

highest recommendation accuracy rates for Method 1 were 0.5 and 0.78, respectively. The lowest and highest recommendation accuracy rates for Method 2 were 0.81 and 0.99, respectively. It can be observed that the lowest recommendation accuracy rate for Method 2 was above 0.8, while the highest recommendation accuracy rate for Method 1 was only 0.78.

The test set in Figure 1 (b) consists of 2000 browsing records from 200 users. Method 1 had the lowest and highest recommendation accuracy rates of 0.41 and 0.66, respectively. Method 2 had the lowest and highest recommendation accuracy rates of 0.8 and 0.94, respectively.

The sparsity of data comes from the lack of correlation between users and news, resulting in insufficient information on user behavior. However, recommendation algorithms based on user similarity can calculate user or news similarity based on the topic relationship between user behavior data and the generated news, which can effectively solve the problem of data sparsity.

Compared to short videos, although Vlog primarily aims to record life and may seem simple, its production threshold is relatively high. When shooting work, bloggers not only prioritize professional shooting tools, but also consider the continuity of camera language, coordination of visuals, as well as soundtrack, editing, subtitles, and other aspects in the production of content. This article conducted a survey on 500 people who followed CCTV Vlog news, including 250 males and 250 females. This article selected 230 different types of CCTV Vlog news, corresponding to 230 different narrators, in order to learn more about the dissemination characteristics of CCTV Vlog reports.

Therefore, in terms of camera shooting rhythm and post-editing, producers need to spend a lot of time and energy. Specifically, CCTV Vlog has certain requirements for the shooting ability of producers. In the production process, the camera needs to be combined with textual symbols, and detailed editing and audio production need to be carried out in the later stage, where the audio production includes the producer's expression and soundtrack. The post-editing with coherent personality can make the work full of charm, and appropriate background music can help render the atmosphere of the picture. The subtitle expression of the producer in the picture is an interpretation of the clues and content of the work, while the subtitle plays a role in emphasizing and supplementing key information, which also reflects the integrity of CCTV Vlog news work. The completeness of CCTV Vlog news works is shown in Table 1:

Table 1: The completeness of CCTV Vlog news works.

Completeness	Number of people	Percentage%
Very complete	206	41.2%
Relatively complete	179	35.8%
General	75	15.0%
Incomplete	22	4.4%
Very incomplete	18	3.6%

As shown in Table 1, in terms of the completeness of CCTV Vlog news works, it was found that 206 people believed that CCTV Vlog news works were comprehensive, accounting for 41.2%; 179 people believed that CCTV Vlog news works were relatively complete, accounting for 35.8%.

The personalization of CCTV Vlog news is shown in Table 2:

Table 2: Personalization level of CCTV Vlog news.

Degree of individuation	Number of people	Percentage%
Very individual	231	46.2%
Relatively individual	162	32.4%
General	64	12.8%
Popular	23	4.6%
Very popular	20	4.0%

As shown in Table 2, 231 people expressed that CCTV Vlog news was very personalized, accounting for 46.2% of the total; 162 people expressed that CCTV Vlog news was more personalized, accounting for 32.4% of the total; only 4.0% of the public indicated that CCTV Vlog news was very popular.

CCTV Vlog has a natural personality characteristic, and each producer has their own unique shooting method. They usually shape their self-image and construct their identity based on factors such as shooting themes, narrative methods, language, etc. While appreciating various Vlog works, they would also discover the unique personality and charm of the producers themselves. Vlog takes the first person perspective as the main line, which can make users have a feeling of empathy in the process of

watching, so that they can have emotional resonance with the creators and experience a subtle sense of companionship with bloggers. This interaction would be deeper and more viscous.

The primary core of Vlog is to record real life, without lines or scripts. There is also no performative creation, and Vlog works showcase personal experiences and emotional expression in real scenes. CCTV Vlog works have a wide range of themes. Sometimes it is a commentary on a hot topic, and sometimes it is a collection of daily life details. The content presented is usually a first-hand record of the creator's personal experience and true feelings.

In the new media environment, everyone is their own protagonist in life, and personal consciousness also awakens accordingly. In a people-oriented communication context, the people-oriented narrative model emphasizes individual expression, emotions, and observation perspectives, which can effectively mobilize the user's enthusiasm. Bloggers use their self-expression on life experiences, emotional perspectives, and other aspects to construct their own image, and express it as personalized characteristics, thereby improving the visual persuasiveness and attractiveness of Vlogs. Humanization is a true portrayal of its uniqueness, and it is also the fundamental reason why netizens pay attention to news. Only through humanization can people exert their greatest influence. Therefore, when people watch Vlogs, they are also appreciating the personal charm conveyed by Vlogs. The degree to which people of different genders perceive CCTV Vlog's strong human touch and affinity is shown in Figure 2:
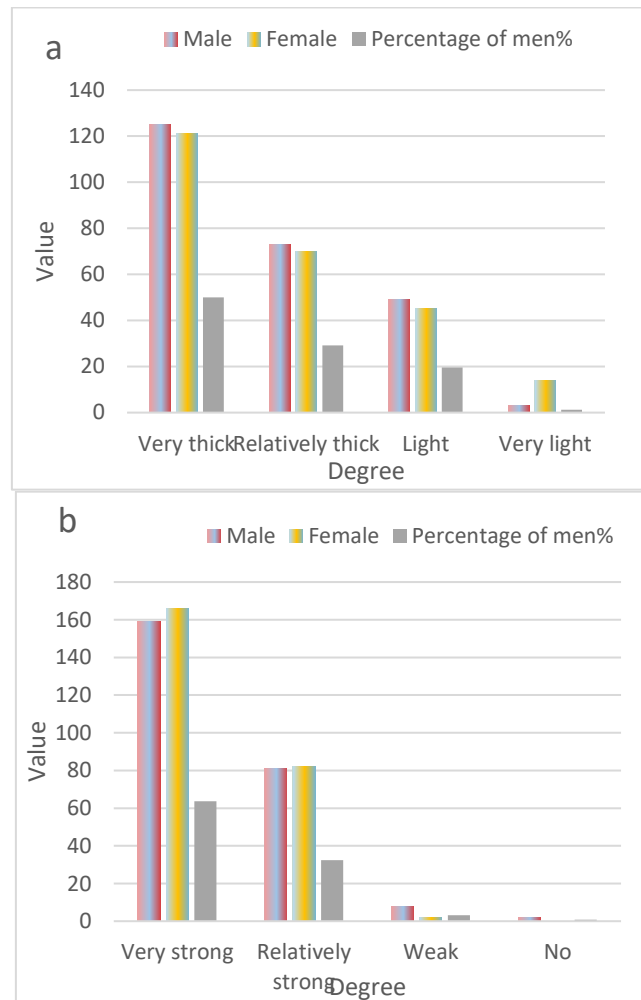

Fig. 2: The degree of humaneness and affinity of CCTV Vlogs as perceived by the masses of different genders.
Fig. 2 (a) Strong level of human sentiment.
Fig. 2 (b) Affinity level.

In Figure 2 (a), it was observed that 125 male people felt that the human touch of CCTV Vlog news was very strong, with a proportion of up to 50%; 73 male people felt that CCTV Vlog news was more humane, with a proportion of 29.2%; only three male people felt that the human touch of CCTV

Vlog news was very weak, with a proportion of only 1.2%. Based on real experiences and emotional needs, CCTV Vlogs used "self-narration" and interpersonal communication to bridge the relationship between the communicator and the audience, gradually enhancing its humanistic appeal and forming strong connections with the masses, thereby enhancing user stickiness and cultivating a stable fan base.

In Figure 2 (b), 159 male people felt that the affinity of CCTV Vlog news was very strong, with a proportion of 63.6%; 81 male people felt that CCTV Vlog news had a strong affinity, accounting for 32.4%. This was because in the content of Vlogs, the emphasis was on recording and sharing, and the emphasis was on authenticity. It presented life truthfully and expressed oneself more naturally, and the personalities of the characters were more distinct, expressing themselves more approachable.

Narrator refers to the person who tells the story, and narrators can be divided into two types: true creator and hidden creator. The former refers to the creator in real life, while the latter is a virtual entity constructed by the creator in the narrative text. In CCTV Vlog news reporting, journalists should use objective and calm language to express the news scene and capture useful information. Statistical classification was conducted on 230 CCTV Vlog news samples of 230 narrators. The types of news samples and the distribution of news sample narrators are shown in Figure 3:
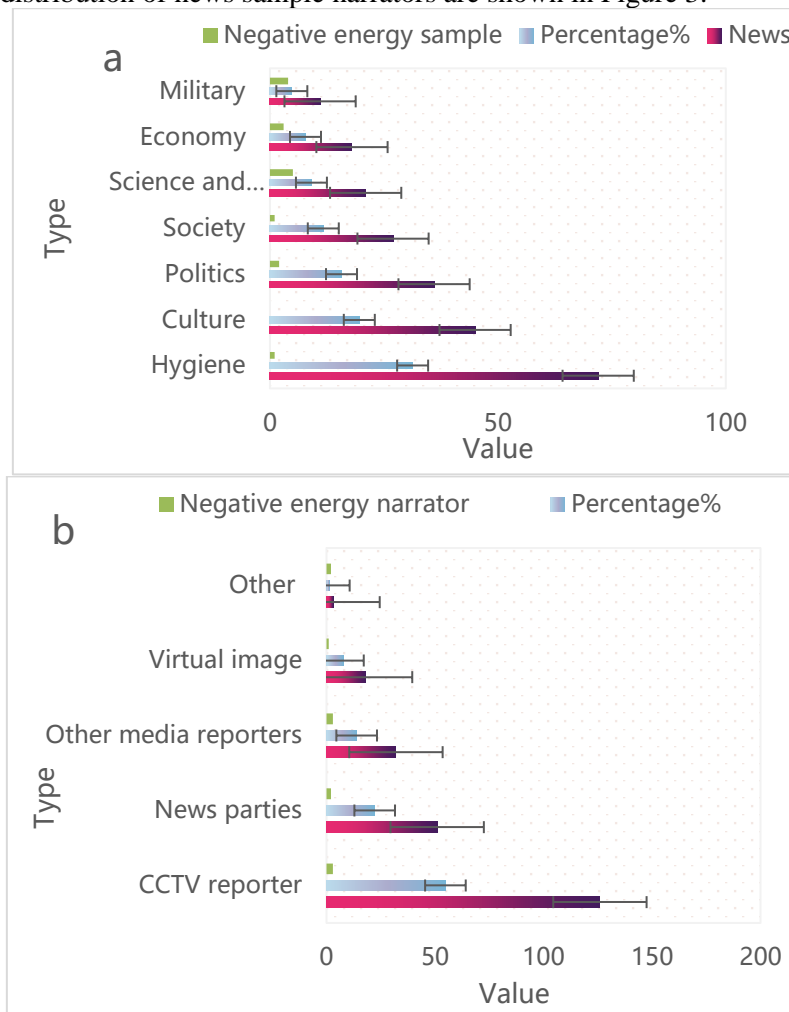

Fig. 3: Types of news samples and distribution of news sample narrators.
Fig. 3 (a) Distribution of new sample types.
Fig. 3 (b) Distribution of news sample narrators.

In the distribution of news sample types in Figure 3 (a), there were 72 health-related news items, accounting for 31.3% of the total. Health related news accounted for the highest proportion, which was related to the epidemic in recent years. There were 11 military news articles, accounting for 4.8%, with the lowest proportion. There were 5 negative energy samples in the new sample of science and technology, with the highest number.

In Figure 3 (b), 126 news sample narrators were CCTV journalists, accounting for 54.8% of the total, including 3 negative energy narrators. Because the main news sample chosen for the experiment

was CCTV Vlog news, CCTV journalists were the most common news sample narrators. 51 news sample narrators were news parties, accounting for 22.2%; 32 news sample narrators were journalists from other media, accounting for 13.9%.

It can be seen that CCTV journalists would become the main force of CCTV Vlog news reporting, which is an inherent demand determined by the characteristics of the news itself and an inevitable development trend. However, due to the singular identity of journalists and the long-term solidification of reporting models, both have had a significant impact on the overall tone and style of Vlog reporting. In order to "tell a good story", Vlog news requires journalists to step out of their "singular" role and become a "self-aware" sharer.

The discussion on the orientation of CCTV Vlog news has never stopped. In addition to pursuing basic elements such as timeliness and authenticity, the value behind news has always been a focus of people's concern. Specific analysis should be conducted on specific issues to reflect the news value, which should be combined with the specific situation of the news itself. In general, new orientations are divided into positive, neutral, negative, and others. The orientations of CCTV Vlog are shown in Table 3:

Table 3: Value orientation of CCTV Vlog.

Value orientation	Number of people	Percentage%
Positive	353	70.6%
Neutral	107	21.4%
Negative	15	3%
Other	25	5%

As shown in Table 3, 353 people expressed that the value orientation of CCTV Vlog news was positive, accounting for 70.6% of the total; 107 people expressed that the value orientation of CCTV Vlog news was neutral, accounting for 21.4%; 15 people expressed that the value orientation of CCTV Vlog news was negative, accounting for only 3%. There was less presentation of negative aspects, which was also the result of CCTV's regulation of news values, promoting positive energy and guidance.

Vlog is a product that adapts to the new media environment. From the perspective of news reporting, it is a video presentation method that plays a positive role in guiding public opinion. Therefore, in terms of value, it would pay more attention to positive publicity.

In the context of mobility, the scene elements in Vlogs are increasingly prominent, becoming an important driving force for media in addition to form, society and content. In terms of scene representation, familiar scenes can enhance the sympathy of the masses, while unfamiliar scenes can arouse curiosity and attention from the masses. In the mobile society, users' media contact habits and selection tendencies have become more diverse, and media experience would inevitably have a certain impact on their future media contact behavior. For a long time, mainstream media has been responsible for the propaganda tasks of the Party and the country, with the characteristics of "standing high, having a distant intention, and having authoritative voices", especially among the youth group.

The age distribution of people in CCTV Vlogs is shown in Table 4:

Table 4: Age distribution of the population.

Age distribution (years)	Number of people	Percentage%
Less than 18	71	14.2%
19-28	255	51%
29-38	108	21.6%
39-40	46	9.2%
Over 40	20	4%

As shown in Table 4, according to the analysis of the age distribution of CCTV Vlogs, it can be seen that the age distribution of CCTV Vlogs was mainly in the range of 19 to 28 years old, accounting for 51%. The number of people aged 29 to 38 was 108, accounting for 21.6% of the population. The number of people over 40 was the lowest, accounting for only 4%.

Vlog adopts a human media dissemination model, which is also in line with the characteristics of social media. In terms of content, it mainly focuses on recording and sharing, while in terms of expression, it is a free, vivid, dynamic, humane, and lively short video.

Each paragraph of CCTV Vlog is brief to highlight the value of the news. At the same time, by showcasing the multidimensional image of the host, it can provide feedback to the media itself, thereby

increasing the public recognition of CCTV Vlog news and enhancing its social influence. CCTV Vlogs should reshape the brand in a way that is closest to the younger generation, actively explore new communication methods, break through discourse barriers, and promote the improvement and development of traditional brands in the new media era. This article divides 500 people into two groups. Each group consists of 250 people, including 125 males and 125 females. One group watches traditional CCTV news and the other group watches CCTV Vlog news. The attractiveness of different news with different genders is shown in Figure 4:
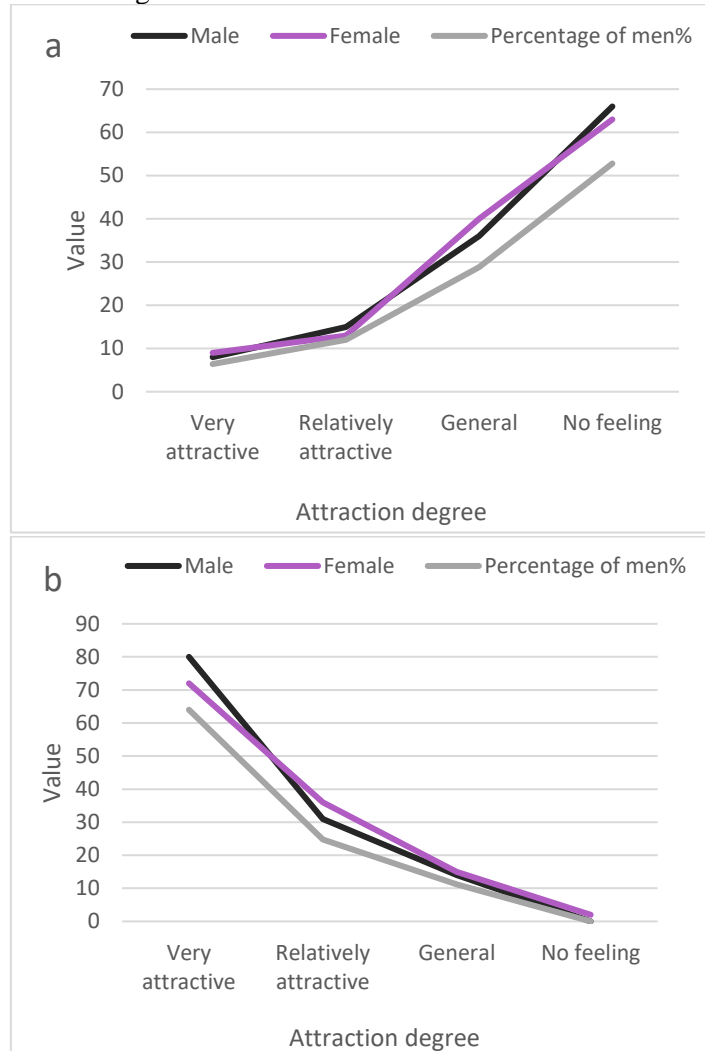

Fig. 4: The attractiveness of different news to people of different genders.
Fig. 4 (a) The attractiveness of traditional CCTV news.
Fig. 4 (b) The attractiveness of CCTV Vlog news.

In Figure 4 (a), only 6.4% of male residents felt that traditional CCTV news can be very attractive to them, but 66 male residents had no feeling for traditional CCTV news, accounting for 52.8%. Because traditional CCTV news was mainly disseminated through television and was very official, it appeared particularly boring. Therefore, the appeal to the masses was not strong enough.

In the survey analysis of the attractiveness of CCTV Vlog news in Figure 4 (b), 80 male people believed that CCTV Vlog news was very attractive to them, accounting for 64% of the total. The number of male people who had no feelings for CCTV Vlog news was 0.

4. Results and Discussion

CCTV Vlog appears on the social video platform with most young people today. Mainstream media such as People's Daily and Xinhua News Agency have settled on short video platforms such as Tiktok, gaining a large number of fans. As the most authoritative news release platform in China, CCTV News has actively penetrated into the user group. By changing the communication voice and linking Weibo,

WeChat, short videos, and other means, more people, especially young people, are guided to pay attention to mainstream discourse. Through brand building, CCTV, Vlog is given more power and shoulders the responsibility of spreading mainstream values. With the changes in communication strategies and expression methods, traditional news has been broken through and innovated, expanding its dissemination scope. This article analyzes and studies the dissemination characteristics of CCTV Vlogs in the network, in order to provide reference for the dissemination of Vlogs in the news industry in the network. According to the results in Table 3, 15 people indicated that the orientation of CCTV Vlog news is negative, accounting for only 3% of the total. There is less presentation of the negative aspects, which is also the result of CCTV's regulation of news values and the dissemination of positive energy and guidance. This paper takes CCTV Vlog as the research object and analyzes the propagation characteristics of CCTV Vlog in detail. It also applies the collaborative filtering recommendation algorithm based on user behavior data and the recommendation algorithm based on user similarity to mine the potential interests of users and realize the corresponding news recommendation, which is conducive to bringing greater social and economic value. The media needs to abandon the traditional voice of news reporting, leverage the characteristics of Vlog videos, engage in equal and personalized communication with users, value user feedback, and innovate the content of Vlog news reporting through user thinking. Of course, catering to users' needs does not mean turning serious news into entertainment, but rather reporting news in a form that people enjoy. How to increase the interest of news reporting while adhering to news professionalism, in order to attract more users to pay attention to news facts, is the future development direction of Vlog news reporting.

5. Conclusions

Vlog provides a new way for media integration in news communication. Combining Vlogs with news is a successful attempt by CCTV to promote deep media integration, which has received widespread attention and unanimous praise from all sectors of society and is also a reference. Vlog has attracted a lot of attention due to its interesting and personalized characteristics, and increasingly media are also trying to integrate Vlog into news reporting. Vlog news report is an extension of news under the conditions of the Internet. It has the attributes of Internet news, as well as the characteristics of the front end of narrative scenes, first person perspective, and colloquial narrative language. However, it should be noted that the current Vlog news reports exhibit a tendency towards entertainment and homogenization. To solve this problem, in future news reporting, it is necessary to continuously improve the way Vlog reports from three aspects: increasing content supply, establishing news reporting brands, and strengthening user thinking, in order to enhance the level of news reporting. In order to achieve good communication results in CCTV Vlog news reports, more active attempts need to be made to allow more successful works to play a greater demonstration and guiding role, and encourage more media to participate in the production and dissemination of Vlog news.

Funding

References

Arthurs J., Drakopoulou S. & Gandini A. (2018). Researching youtube. *Convergence*, 24(1), 3-15.

Bowe, Brian J. (2019). Separating real from fake: Building news literacy with the Frayer Model. *Communication Teacher*, 33(4), 256-261.

Dan, Viorela, & Juliana Raupp. (2018). A systematic review of frames in news reporting of health risks: Characteristics, construct consistency vs. name diversity, and the relationship of frames to framing functions. *Health, Risk & Society*, 20(5-6), 203-226.

Egelhofer Jana L. & Sophie L. (2019). Fake news as a two-dimensional phenomenon: A framework and research agenda. *Annals of the International Communication Association*, 43(2), 97-116.

Eun-mee, K. & Jennifer I. (2020). More than virality: Online sharing of controversial news with activated audience. *Journalism & Mass Communication Quarterly*, 97(1), 118-140.

Geers, S. (2020). News consumption across media platforms and content: A typology of young news users. *Public Opinion Quarterly*, 84(S1), 332-354.

Glogger, I. & Lukas P. Otto. (2019). Journalistic views on hard and soft news: Cross-validating a popular concept in a factorial survey. *Journalism & Mass Communication Quarterly*, 96(3), 811-829.

Jiayin, P., Zhi L. & Xiaoming Y. (2022). What drives people to repost social media messages during the COVID-19 pandemic? Evidence from the Weibo news microblog. *Growth and change*, 53(4), 1609-1626.

Jingfan, H., Siti Aishah Mohammad R. & Akmar Hayati Ahmad G. (2023). Analysis of the impact of Vlog news media form shaping on audience psychological immersion based on psychological experience process. *CNS Spectrums*, 28(S1), S27-S28.

Jin, L. & Tao J. (2022). Intelligent real-time news communication platform in education. *Mobile Networks and Application,* 27(3), 1218-1227.

Kessler, Sabrina Heike, and Ines Engelmann. (2019). Why do we click? Investigating reasons for user selection on a news aggregator website. *Communications*, 44(2), 225-247.

Masip, P., Jaume S. & Ruiz-Caballero C. (2020). Incidental exposure to non-like-minded news through social media: Opposing voices in echo-chambers' news feeds. *Media and communication*, 8(4), 53-62.

Nee, Rebecca C. & Arthur D. Santana. (2022). Podcasting the pandemic: exploring storytelling formats and shifting journalistic norms in news podcasts related to the coronavirus. *Journalism Practice*, 16(8), 1559-1577.

Schafraad P. & Ward Van Z. (2020). Reconsidering churnalism: How news factors in corporate press releases influence how journalists treat these press releases after initial selection. *Communications*, 45(s1), 718-743.

Wang, B. (2022). Research on the International Communication of Zhenjiang Regional Culture Based on Short Video. *Cultural and Religious Studies*, 10(9), 536-540.

Xiang, L. (2022). On the news integration skills in the new media era. *Journal of Higher Education Research*, 3(1), 14-16.

Yilang, P. & Tian Y. (2022). Anatomy of audience duplication networks: How individual characteristics differentially contribute to fragmentation in news consumption and trust. *new media & society*, 24(10), 2270-2290.